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(54) **METHODS AND COMPOSITIONS FOR ADMINISTRATION OF IRON**(71) Applicant: **Luitpold Pharmaceuticals, Inc.**, Shirley, NY (US)(72) Inventors: **Mary Jane Helenek**, Brookville, NY (US); **Marc L. Tokars**, Douglassville, PA (US); **Richard P. Lawrence**, Calverton, NY (US)(73) Assignee: **Luitpold Pharmaceuticals, Inc.**, Shirley, NY (US)

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(58) **Field of Classification Search**

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See application file for complete search history.

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**Stephanie Seidman****(57) ABSTRACT**

The present invention generally relates to treatment of iron-related conditions with iron carbohydrate complexes. One aspect of the invention is a method of treatment of iron-related conditions with a single unit dosage of at least about 0.6 grams of elemental iron via an iron carbohydrate complex. The method generally employs iron carbohydrate complexes with nearly neutral pH, physiological osmolarity, and stable and non-immunogenic carbohydrate components so as to rapidly administer high single unit doses of iron intravenously to patients in need thereof.